



Natural Heritage &
Endangered Species
Program

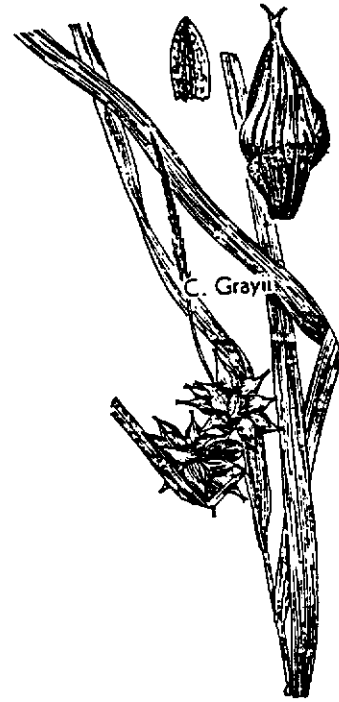
Commonwealth of Massachusetts
Division of Fisheries & Wildlife
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MASSACHUSETTS THREATENED PLANTS

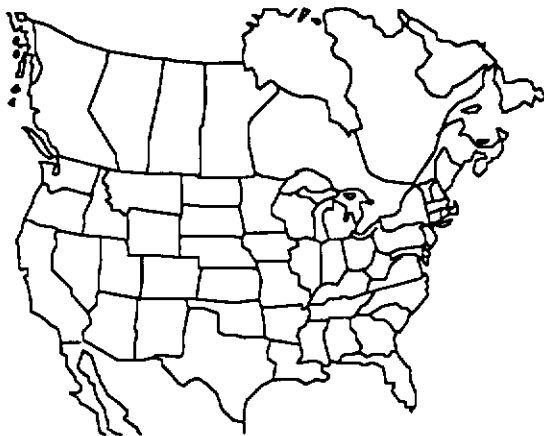
GRAY'S SEDGE
(*Carex grayi* Carey)

Description

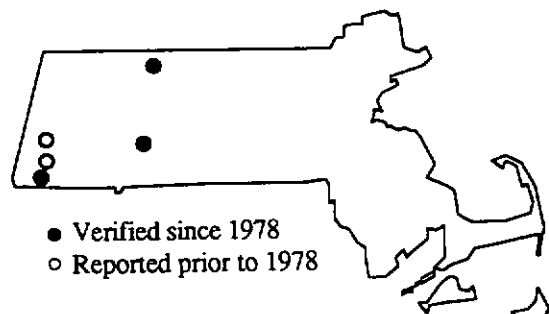
Gray's Sedge, a member of the Sedge family (Cyperaceae), is a perennial, pale green to gray-green, grass-like herb that grows in dense clumps. The plants grow from 3-9 dm (1 - 3 ft.) in height and have many firm, 2-3 dm (2/3 - 1 ft.) long leaves. The purplish-red basal leaf sheaths are persistent. Each stem has one, terminal, elongate, staminate (male) spike and one to two globe-shaped, pistillate (female) spikes (inflorescences with stalkless flowers and bracts). If there are two pistillate spikes, they are arranged close together. The 8-35 perigynia (sac-like structures that enclose the female flower parts) seem to radiate out from a central point. They are often pubescent (hairy) below the midpoint and are rather large--growing 12-18 mm (12/25 - 18/25 in.) long. The fruits are



Gleason, H.A. The New Britton and Brown Illustrated Flora of the Northeastern US and Adjacent Canada. NY Botanical Garden, 1952.



Documented Range of
Gray's Sedge



Massachusetts Distribution by Town

softly three-angled achenes (dry one-seeded fruits that retain their seeds). Gray's Sedge fruits from late June to early September.

Range

The range of *C. grayi* has been documented as extending from southern Quebec, southern Ontario, Vermont and Massachusetts to Minnesota, south to Georgia and Missouri.

Similar Species

Gray's Sedge could be confused with Bladder Sedge (*Carex intumescens*) and Button Sedge (*C. bullata*). In contrast to Gray's Sedge, Bladder Sedge usually has only 5-10 perigynia per pistillate spike, and these perigynia are shiny, while those of Gray's Sedge are dull. Furthermore, Bladder Sedge's leaves are only 3-8 mm (3/25 - 8/25 in.) wide, compared to 5-15 mm wide in Gray's Sedge. Button Sedge has perigynia that are much smaller than those of Gray's Sedge--only 6-9 mm (6/25 - 9/25 in.) long compared to 12-18 mm in Gray's Sedge. In addition, Button Sedge's leaves are very slender.

Habitat in Massachusetts

Habitats include river floodplain forests, including remnant strips now bordered by open pastures. Most of the floodplain forest stations of Gray's Sedge are flooded each spring. Among the plant species associated with Gray's Sedge are American Elm (*Ulmus americana*), Green Ash (*Fraxinus pennsylvanica*), Pin Oak (*Quercus palustris*), Silver Maple (*Acer saccharinum*), Wild Onion (*Allium canadense*), and various species of Wild Rye (*Elymus* spp.). Rare Massachusetts plants that have been found with Gray's Sedge include Davis's Sedge (*Carex davisii*), Wild Black Currant (*Ribes americanum*), Winged Monkey-flower (*Mimulus alatus*), and Cat-tail Sedge (*Carex typhina*).

Population Status

Gray's Sedge is presently listed as "Threatened" in Massachusetts, where there are six current stations (discovered or relocated since 1978) in three towns and two historical stations (unverified since 1978). All of these are in western. Gray's Sedge is also considered rare in Vermont, Mississippi, and Maryland.